

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: 26 Jun 1995 18:41:51 -0600
From: "rohre" <rohre@arlut.utexas.edu>
Subject: [1271] Austin Field Day antennas, lessons
Message-ID: <n1407930333.58092@msmailgw1.arlut.utexas.edu>

Thought the antenna fans would like to hear about some antennas that were used in this area for Field Day. Also an observation about non ideal sloper!

Although I had a design idea that for the declining sunspot cycle you would need gain antennas to do well on 40 and 80; the person in charge of building antennas for one of the clubs I am in wanted to use two of his G5RV's, and a coax dipole for 40. I loaned a Kenwood 450A, and on one of the G5RV's up on a 30 foot TV type light wt. tower, in an open field East of Weir TX, with clear shot to all directions, the result was about 500 contacts for Field Day. A Home brew T tuner was used with this set up, and no balun between the coax and the ladder line portion of the 5RV.

The lack of gain was made up by the use of the G5RV as an inverted V giving an omni pattern and allowing contacts in all directions and long and short skip.

Not knowing the tuner was home brew, I remarked upon first seeing it: "I did not know Radio Shack ever made a ham tuner" It had a handsome case with the Archer name and logo on the front! Bill was tickled I took it for a commercial product. He builds a good tuner, and G5RV!

Friday night, down in Austin at the top of the Balcones fault line on the hill at Doss school, I had left the venerable two cylinder Onan, with a case of "no gas prime", and had asked the Field Day chairman to be sure and have an 80M dipole put up for use on 40 and 80 Sat. nite. I had bought the last roll of ladder line in town, and had 3 tuners to ensure we could load up with one.

When I got back to the Austin site, about 32 mis. from the other one; (Not a good idea to help with two Field Day operations!), they had found a bit of RTV atop the sediment bowl cured the loss of priming and suction from the gas cans. They had the 80 Meter dipole assembled east and west, but only 10 feet off the ground on one end, and going through two Oak trees, and one end 30 feet up a tower to the east!

This previously ideal hill top site with clear shot to the East, South and North, and slight rise to West, had recently been compromised with a North-South power line half way along on the crest from the North, and another school portable building under construction. (The crest slopes to the South, as the fault runs North and South.)

I found the 80M antenna had been tried with ladder line, but "the tuner would not load it well." I discovered the tuner had an inop Forward power meter, (both diodes shorted prior to Field Day). They had abandoned the ladder line,

and used RG 8 in several pieces. I found with a second tuner or the first, I could load the antenna on 10 meters, as the event was on; and an eager tech+ wanted to operate. A number of contacts were made on ten; then I got an experienced tower climber, and several of us to move the dipole to the only clear area along the fault crest, with one end raised further up the tower to the 60 foot level.

Lucky for us, about that time a ham new to the club showed up with much enthusiasm and a sling shot and weight! I had some light nylon string in my tools, so a 30 foot high oak tree fork was found in range, and the other end of the antenna successfully raised there, to the South and down hill from the tower. The move necessitated splicing on 100 more feet of coax in two pieces; to save time an inline solder splice was used after twisting center conductors together. Taping this, and soldering pigtail braids over that. Uggh, don't try this except in (simulated) emergency!

As the tuner was going to go home with me (15 miles) and get repaired; I raised all coax off the ground, and tied it with nylon string to trees along the path. What a feedline! Both sides of the coax would be hot, and hopefully elevating the feed would cut our losses. Unfortunately, we did not have enough ladder line, nor an extra balun to use the ladder line's lower losses to advantage. (ie, to mix use of ladder line and coax.)

Actually took both tuners home, and replaced two diodes in one and an increased value resistor in the other metering circuit that had low deflection.

Upon my return at midnite; I set the new diode compact B&W tuner upon the brand new Kenwood TS-140 we were testing; and found I could not get the antenna to load on 80 or 40! After even trying 10, where it had worked before, I realized I had the tuner in aluminum box, sitting on the KWood, and moved it off to the side. I did not have a magnetic field shielded tuner. An IMPORTANT finding! Although this tuner has steel plates above and below the vertical coil to keep it from having top lid effects like some MFJ tuners, there was apparently too much capacitance coupling to the K wood case, because now the separated boxes worked like a champ and full power could be easily achieved as forward power into the antenna. I definitely had a capacitive ground loop placing the boxes atop each other. The coax jumper to the rig had a shield that was one circuit, and the cover to cover effects were the other ground "connection".

The B&W Tee Tuner did a good job once you found the right inductor tap. You could then go all over 80 Meters phone band with little or no capacitors resetting.

Often only the output capacitor was the one adjusted. The initial setting was found by setting both capacitors to half mesh, and then adjusting the coil tap for Forward power indication. Final settings resulted in perhaps 3% reflected power.

Most contacts were made with one short call. Unlike some years, there seemed to

be some space between stations frequencies, but the band was well occupied. Few Canadian provinces were heard, which is different than the years on 20M. Only part of the time did I have someone helping with the logging. At those times, we used a Y splitter adapter from Radio shack to parallel two phones on the radio.

This worked with good volume, except when we used a Yaesu 990 briefly. It could not efficiently drive paralleled phones.

With careful listening, 80M was far less a chore than I had anticipated, static was bad late in the night, but TX was spared nearby weather (storms). I am starting to collect wire now, in hopes of a loop experiment next Field Day. The task of hanging an 80 M vertical loop is a challenge as our site is more occupied with portable classrooms, and trees. The cliff on one side keeps us from orienting a loop off the old high tower. I have been wondering if a horizontal loop might work, as it likely would not be parallel to the ground with the slope of the land to the South. Otherwise, I have heard horizontal loops make cloud warmers!

The antenna story on 15 and 20 was a vertical and 3 element Telex Hy Gain beam were put to good advantage. We have found you do not need to waste operating time rotating a beam with a motor, a rope on one end of the boom and the other do fine. Usually the beam is left pointing to the North to cover all the country with little loss to the extreme coasts. I am not sure what antenna our Tech + was on, and it may have been a vertical or the beam, but he worked the Marshal Islands much to his surprise. At first he thought it was a bogus prefix! The beam was 30 feet up another tower, with VHF beams above it, and a VHF vertical colinear.

Operation on 80 was "Hunt and Pounce" I would answer stations calling CQ, starting from one end of the band, and working each one I heard going to the far end. Then I would start back. I contemplated playing "King of the Hill", and trying to find a clear frequency and calling CQ, but I never ran out of unworked stations with the first method, which probably is the best one for pure QRP stations to use up against the QRO herd on FD. Note, I had been outvoted and "had" to be QRO, but I feel I could have done phone with QRP with only slightly more effort. The speech processor of the rig and good receiver were vital ingredients on 80M with the static crashes. Too bad the rice box noise limiters are ineffective against static. The Notch was a big help, however. The other operating position had an all band vertical and a Kenwood TS-50 which has a disappointing (wide) receiver compared to the 450A, TS 130, and TS -140, and Yaesu 840 and 990 I have tried. However, they did a job on 40M. The vertical was on a home made stand of pipe up 5 feet, and the pipe was welded to diamond tread plate for a base and counter weight, virtually self supporting.

Back to 80M, the contacts were interesting; it sounded like 20M, my favorite band in former FD years. First I would work the East Coast, and then the West,

then the mid west, followed by West Coast again. I seemed to have a pipeline to San Diego and the LA and Bay areas by Frisco. At the same time, it was interesting to get very strong short skip from Ok and ARK, or within TX. It seemed even tho the sloping half wave dipole sloped to the wrong direction from conventional wisdom; and favored long path, it made little difference with the Field Day contacts east and west, giving a good skip. Worked one battleship, in Alabama! Also one submarine!

Would venture to say the sub was on the surface, hi.

Well, lessons learned. Have extra wire to make new antennas if something does not work. Have more ladder line than you could possibly use, it could come in handy. This year at least, it was not necessary to have a loop to compete on 80. A loop would have taken more wire than we could free up for the purpose, and getting 270 feet of wire up a respectable distance on the school yard would have been a challenge to do vertically, and have it orient in a favorable direction. We could have done it horizontally, if two more masts had been at hand. We had one tower unused, but not enough persons to assemble it. It takes a lot longer in the hot sun to put up antennas than you ever plan for it to take! Along with all else, the first time we hoisted the moved 80 meter dipole, it pulled apart at a splice to the center insulator; someone had only twisted the wires in parallel; instead of locking them around each other and twisting. Actually, they should not have spliced onto the scrap left from a prior antenna.

The wire was not passed through the eye that would relieve the stress on it, and this led to it pulling out from around the screw termination. The wire loop should have gone clock wise around the screw head, so it forms a tighter loop as the screw is tightened, in haste; someone did a reverse of this.

An interesting hazard developed during the moving of the dipole. I had not experienced this one before. About 2 feet above where the dipole was to be attached to the old tower on hill crest, a bird had a nest on a cross arm. Unseen by our valient climber Bob, the bird suddenly awoke to Bob's presence below it and the nest, just as he finished attaching the dipole line. The bird flew off the tower, and at first, I thought it was a tool falling from Bob's tool bucket on his climbing belt.

However, it suddenly stopped in mid air and hovered about 10 feet out from Bob and the tower. As Bob started climbing down, a second bird arrived on the scene and hovered above the other one, and closer to the nest. This defensive behavior continued until he was 10 feet off the ground, whereupon the birds returned to the nest and one took a perch 20 feet above in the tower. Reminds me to put binoculars on my tool list to more closely inspect towers of opportunity before use!

We were not as efficient in logging as we could have been, but managed to get some lap tops part of the time to do computer logging, and had one on a packet set up the whole time. We also had a multi band VHF station in addition to the two HF and one Novice Tech set up. Some 6 meter contacts were made, but lack of turn out of operators meant a continuous watch was not kept on the VHF scene.

A strange thing happens every year at Austin's FD. Some of the club officers, and a few faithful turn up to set up on Fri. Night and Sat. a.m. Some members sign up for differing shifts to operate. Then, some folks we never see any other time show up and operate. There are some regular members who never pitch in and offer to operate. At least some of those come and help with other chores, but another breed just come and visit; and even sometimes get in the way! I wonder if other clubs suffer this? This is of course a general interest ham club, not sole QRP, or HF or VHF types. In fact, there are separate clubs here for Contesters and TV. We try to sign in all who visit, but it is hard to get some of the operators who are not club members to join the club, and the officers generally are operating or doing jobs that make it hard to be recruiters. I am amazed at these mystery operators who hear about Field Day, and participate, but then disappear until next year!

I am a little disappointed that it seems as more hams become appliance operators, they become unskilled at setting up emergency stations, unlearned in the types of antennas/ equipment needed to do various jobs, etc. An example of this is one club member who volunteered to bring a rig, and showed up with a Collins linear! I told him how could he expect our one generator to power all the other stations and that! But, he said, it could be turned down to 150 watts! I said why bother, the commercial rigs put out 100 all by themselves, and there would be no advantage. He did leave his Kenwood TS-50. I was glad of that, as we learned I was better off buying the Scout than the small Kwood for mobile. As I noted above, the receiver leaves a lot to be desired. Oh well, another FD in the log! Hope all got back safely!

-Stuart K5KVH

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 1995 17:14:34 -0700 (PDT)
From: Jim Lowman <jlowman@netcom.com>
Subject: [1272] New Licenses...
Message-ID: <Pine.3.89.9506261738.A15375-0100000@netcom7>

I just read that some group did without a novice-class station for FD for lack of a new ham having received his/her license. Hopefully, everyone is aware of the callsign server at the University of Arkansas-Little Rock that mirrors the FCC callsign database for the most part; I believe it is updated nightly, or every couple of days at the worst.

If I had known about the novice-to-be last Friday, I could have checked for the callsign through WWW. As you probably know, under the current FCC regulations, a new licensee may begin operating as soon as he/she becomes aware of the new callsign.

If anyone is hanging in the balance waiting for a new callsign, drop a

note to me or post it here. I check my mail first thing each morning, every morning, as long as I'm in town. I've been offering this service to hams who pass tests at our monthly VE session, and can probably handle the workload here, as well.

All I need is name (as stated on the form 610) and address.

Jim

jlowman@netcom.com		Jim Lowman	* KF6CR*	San Bernardino, CA
Systems Analyst		San Bernardino City Unified School District		
(909) 881-8146 (O)		Unix: "It isn't supposed to be easy...If it		
(909) 862-0662 (FAX)		was, everyone would be doing it." -Unknown-		

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 1995 21:50:25 -0500 (EST)
From: NYOUNG@nova.wright.edu
Subject: [1273] Zuni-Loopers, loopy zoomers and where do they get all that stuff?
Message-ID: <01HS6DJQTYN08WZZXC@nova.wright.edu>

Looking over the continuous screens that held the report from the Zuni-loop gang, I suddenly realized that there are a lot of people on this planet with entirely too much free time on their hands.

Did anyone notice all that equipment? I mean there were enough radios to float an entire revolution in Colombia without even asking Che Guevara to make sure he brings along his asthma medicine. And that's even before he gets lost in the jungles of the farm he bought to foment revolutions from. Jeezh. With all that equipment you could even have two or three revolutions going on at once.

A scene from a Monty Python flick comes to mind: "Splinter!"

And antoonas! Who the hell dreams all this stuff up. Wire beams at 100 ft and a simple dipole at 50. C'mon people. This was war. My five watts against your 2 kw and the ionosphere be fried. And yes, I know: just because I run qrp doesn't mean that I have to use crappy antennas. But there has to be a limit.

I figure that there must be a couple centuries of experience in all those fingers and keyboards and paddles and keys and whotnot. That many people in one place, with that many radios, using up all those flashlight batteries must mean something. What, like cured salmon being cured of what, we will never know.

Ok. Ok. Sour grapes. But I still think the lesson plan that I came up with on that restaurant table cover is just as good as whatever. Postmodernism. That's what.

Yeah, all that radio power was out there on the hillside doing its radio act. That's what. Like the Lenny Bruce "Lone Ranger Bit." For the act.

And we were true to the food, too. Weren't we?

73
Nils
WB8IJN &c

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 1995 22:01:30 -0400
From: ah301@yfn.ysu.edu (Jerry Sy)
Subject: [1274] any qrpers in the sunnyvale,CA area ?
Message-ID: <199506270201.AA04097@yfn2.ysu.edu>

hello fellow qrpers,
I will be relocating to Sunnyvale, CA next week and would like to know if there is anybody here in the list with qth in sunnyvale area. I just like to get an idea of how the ham radio activity there is, what clubs to join, how is 2m activity , etc.

also, where is the norcal group based ? do they have regular eyeball meetings ?

please email your reply.

thanks
73 de jerry
AA3KN

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 1995 22:10:34 -0400 (EDT)
From: rarland@epix.net
Subject: [1275] Milliwatt FD Results
Message-ID: <Pine.SUN.3.91.950625222924.11925B-100000@mango.epix.net>

Hi Gang:

Initially, I was going to post this last evening (Jun 25) but I got a disconnect and my entire text got trashed by Epix. So, here it is again, enjoy.

Well, FD 95 is over and Fran, KA3WTF, and I had a ball using the NorCal-40 and a Radio Works BigSig Loop for 40 meters. Since the Wyoming Valley QRP Commandos (thats Wyoming Valley in Pennsylvania, not Wyoming) were unable to make things happen as a club entry this year (too many people going in different directions), Fran and I decided to do a milliwatt event using homebrew gear.

Our Red Rock Mt. site fell thru....couldn't get the site we wanted (it's a very tree covered area and the site we wanted was relatively clear, making it easy to erect antennas), so we set up in the lot beside my house.

Three 10ft sections of steel mast (R-S) went together and were braced against the corner of my fence. A pulley at the top of this mast took care of one end of the loop. Next I took down my wife's clothes line and used that pulley on the top of a 25 ft mast in the opposite corner of the yard to secure the other end of the antenna. The loops went up as a rectangle 92 ft long and 12 ft high, approximately 8 ft off the ground at the lowest point.

The rig was a NorCal-40 with the power cut back to 900 mW. Since the power output on the NC-40 is nonlinear, we ran anywhere from 650 mW to 900 mW depending upon which portion of the band we were in.

I had put the finishing touches on an L-Match antenna tuner about 2 hrs before the contest (had to look nice for the press, you know...all the gear had to be color coordinated), and used it to tame the wild impedances in the loop. Using my Autek RF-1, I found the loop resonated at 12.1 MHz. The tuner took care of that problem by providing a good match for the TX.

Fran had to work late on Saturday, so I started the contest and ran until 9PM when Fran arrived for his stint until 3AM Sunday. Qs were slow in coming. We really had to work for them. I found there to be a tremendous difference between 5 W and 900 mW as far as making Qs. With 5 W we rarely had to call more than twice (at most) to get a Q. With 900 mW I found that we had to repeatedly call loud stations 6 or 7 times in order to get a Q.

By the time Fran arrived, I had amassed a grand total of 46 Qs. Fran added another 20 during his stint at the key. When I came back to the tent at 3 AM, things went slowly until about 4:30 AM when 40 meters

suddenly firmed up to the West coast and I started making Qs like mad.
(NOTE: all times referenced are EST)

When the dust finally settled we had amassed a total of 135 Qs, all with 900 mWatts, a low-to-the-ground antenna and homebrew gear with a limited tuning range (50 kHz)! Fun was had by all.

Impressions: Milliwatting is a lot of fun, BUT you need to readjust thinking before jumping into the fray. I found that by being aggressive I was able to rack up more Qs (I know, so what's new about that?). By aggressive, I mean that when a station heard part of my call and sent "QRZ?", instead of just coming back with my callsign, I would drop my call twice and follow it right up with the exchange, forcing the other op to copy the entire string which shortened the time it took to complete a QSO dramatically. This also tends to offset the problem of QSB which can arise between exchanges.

The tuning range of the NC-40 is much too small for serious FD work. A full spread of the CW portion of the 40 meter band is a must. I had changed out C49 in my NC-40 to provide a smaller tuning range in order to increase the ease of tuning. Originally my NC-40 tuned about 68 kHz, which is OK but the tuning is very critical, making it easy to tune right across a weaker station.

As the contest progressed, I found that the very strong stations were actually harder to work than the second and third tier stations. Many times, we worked moderately weak to weak stations on the first try! I guess the old contesters' saying: "Loud is good" has nothing to do with competent operators.

Rough score, without any bonus points: 1350. Not bad, if I do say so myself. Fran and I had fun and will do this again, rest assured.

OBTW: No one won the set of QRP books, so we are donating the set of three volumes to the QRP ARCI for a prize at the Dayton 96 QRP banquet.

73 rich

PS: What excuse are the Zunis using this year.....last year was a forest fire (right on time), and the earthquake occurred AFTER FD was over this year. (HI HI)

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 1995 23:40:04 -0400

Unbelievable. I mean, what pain. You go to field day. You die in the heat. Stuff don't work. You drag yourself to work Monday. You come home and find your brand new QRP+ in the mail - the day after you need it. What's a guy gonna do?

From qrp-l@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 1995 23:59:48 -0400
From: Chris Doherty <doherty@lydian.scranton.com>
Subject: [1277] Re: Murphy
Message-ID: <Pine.3.89.9506262339.B15506-01000000@lydian.scranton.com>

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> Unbelievable.  I mean, what pain.  You go to field day.  You die in the heat.
> Stuff don't work.  You drag yourself to work Monday.  You come home and find
> your brand new QRP+ in the mail - the day after you need it.  What's a guy
> gonna do?
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-73- de N3UVR grp

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Take me to your leader.      (_|_)    Leader? What leader? We don't got no  
                             <(_>>     stinkin' leader!  
Chris Doherty               <0/0/0/0/0/>  
doherty@lydian.scranton.com <%/%/%/%/%/>
```

From grp-1@lehigh.edu Tue Jun 27 18:58:18 1995

Date: Tue, 27 Jun 1995 00:08:28 -0400 (EDT)
From: Aa4xx <aa4xx@nando.net>
Subject: [1278] Re: Ladderline Fiasco
Message-ID: <Pine.SUN.3.90.950626234628.1031A-100000@merlin.nando.net>

On Mon, 26 Jun 1995, Mike Robinson wrote:

>
> Paul,
>
> There's a subtle but interesting point to your story about
> testing the feedline while running it through your house.
>
> It is readily apparent that your family thinks you're
> completely insane and has become used to it. Sort of
> like having a senial grandfather living with you.

> Have you ever caught them explaining to neighbors or
> friends, in a whisper, "He's a ham radio operator."
> While spinning their finger around their ear, indicating
> that you're not quite right in the head.

Mike,

Thanks for the humor. We all need a chuckle every now and then.
Your comments brought a humorous experience to memory that I'd like to
share with you.

Last year my wife and I went to a local restaurant for supper. I
pointed out a ham's license plate, and mentioned to my wife that it would
be neat if I could meet this ham. Sue responded, "No problem, I'll point
him out to you." Of course I was thinking, "Yeah, Right." We had just
walked into the crowded restaurant when she said "THAT GUY OVER THERE AT
THE SALAD BAR IS THE HAM." I kind of sheepishly walked over to the guy
and asked him if he was driving a Blue Chevy. He nodded yes. Then I
asked if it was the one with the ham call sign. Yes, again. When I
explained that my wife had picked him out of a crowded restaurant within
2 microseconds, we both had a good laugh.

So I asked Sue how she could pick out a ham so fast. Well, guys,
does the word "nerd" apply to any of us?....Certainly not to any of us QRP
guys.....It must be our stunning good looks, coupled with our perfect
physiques, that gives us away! 72,
Paul, AA4XX

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 00:53:54 -0400 (EDT)

From: Aa4xx <aa4xx@nando.net>
Subject: [1279] Re: Twin Vertical Phased Array
Message-ID: <Pine.SUN.3.90.950627003112.1031D-100000@merlin.nando.net>

On Mon, 26 Jun 1995, Rick Zabrodski wrote:

> The above is fine for monoband performance....has anybody built a phasing
> box to allow multiband use? How did it work? Plans?

^

Two years ago, I built a continuously variable phasing box which covers 80-20 meters, which is presented in the ARRL Antenna Compendium, Vol 3. This design works very well. I originally used it with two Gap Voyager verticals on 80 and 40 meters for DX work. Typical F/B ratios of 25-30 dB are easily obtainable.

For this year's Field Day, I used two 40 meter inverted vees, 35 feet apart, fed with this phasing box to make a 2 element inverted vee wirebeam. The wirebeam was oriented North/South. Results were very encouraging, with about 6 dB gain over a reference vee, and F/B ratios approaching 30 dBd on some signals. To change direction, all you have to do is flip a toggle switch, and bingo, you're ready for action in the opposite direction. It was really neat to be operating from NC, and be able to instantly determine if the station was North or South of my location simply by flipping one switch.

This box is relatively easy to build, and the cost is moderate, about 75-100 bucks for all the parts. I'll be glad to share any ideas for anyone who might like additional information on the phasing box.

Having the additional gain made it seem like we were running QRO. There were very few requests for repeats, and the QSO rate was pretty good throughout the 24 hours. 72,
Paul

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 00:59:03 -0400
From: JessQRP@aol.com
Subject: [1280] Re: NE30-40 low power out
Message-ID: <950627005901_103013974@aol.com>

I pushed mine down just as far as it would go. Most of the components on the board are dang near "surface mount";-). I did notice quite a decrease in efficiency and output tone when trying to adjust for much more than 700 mils. I decided for now to settle for a weaker clean signal than have the output power. I already have another rig on 30 that will do over 5 watts out and so this one was more of an excersize in building. I was wanting to get one of Dave's rigs in his enclosure. I will admit that the best performance I have

seen from his rig's have been on 40. The one I have has outstanding receiver performance for as simple as it is and contacts are no sweat at 1.5 watts. Also I notice that the receiver on the 30-40 version does not seem as hot, so I think that the design must be optimized for 40 meters. Great rig for the price for 30 meters though. Enjoy it. I would heartily recommend Dave's rigs for anyone interested in a fairly simple rig to build and success almost insured. Now if I could just get one of the keyer/ counters that Wayne is working on for WRA-1, and tweek the output to 1-1.5 watts Lookout!

Jess

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 01:05:08 -0400 (EDT)
From: Aa4xx <aa4xx@nando.net>
Subject: [1281] Re: K3WW QRP+ 1BBattery 1 OP
Message-ID: <Pine.SUN.3.90.950627010153.1031E-100000@merlin.nando.net>

Charles,

What an outstanding effort you posted! I remember working you on both 40 and 20 meters from our FD site in North Carolina, thinking that K3WW must be a QRO station..Your signal was right up there with the big boys. Keep up the good work. 72,
Paul

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Mon, 26 Jun 95 23:07:09 -0700
From: jess.gypin@dinosaur.com
Subject: [1282] ne30-40 low power out
Message-ID: <9506262307.0WH8C00@dinosaur.com>

-=> Quoting Teda@meaddata.com to Jess Gypin <=-

TE> I had the motorboating problem too and found it got better once I
Te> placed it in the case, however, it still isn't the greatest on the
Te> sidetone at 1.5 watts. My output adjustment via r2 is not smooth. I can
Te> either set it to .5 watts or it jumps to 1.5 watts.

Te> 73 de Ted, KF8EE

I have had the same problem. The other side effect is that the transmitted signal does not quite track with the receive. If you hook up another rig and listen as you tweek the power up, you will notice that the output tone drops in frequency. The front end is just getting saturated. I can squeeze mine

all the way to almost 2 watts but the efficiency of the transmitter is lousy at that point. Even my two meter rig starts picking harmonic junk if I drive it too hard. I talked with Dave about this and he suggests trying a 10 pf cap instead of a 5 pf at location C24 in the transmit mixer. I have not tried this yet so I cannot attest to the outcome. Also, if you go back and carefully retweek the two caps C23 and C26 while tweeking the output pot, sometimes you can find a happy compromise. Just remember not to push down hard on the trims as the pressure will cause the thing to go out of wack when you let up on the adjustment....

Good luck, I did work VE6zaa last night, so better than 1000 per watt at 700 mils into an R7, not the most efficient antenna for the band!

Best
Jess

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 06:57:26 -0400 (EDT)
From: Risley <risley@nando.net>
Subject: [1283] Re: Twin Vertical Phased Array
Message-ID: <Pine.SUN.3.91.950627065158.12970A-100000@parsifal.nando.net>

Hello Paul, Glad to hear FD went well for you folks! I'd be interested in looking at you phasing box. I'm thinking about putting up 2 or 4 phased verticals in the side yard. (I ran a 20 meter vertical dipole in Boone and made L*O*T*S of DX contacts...Had a friend that ran 2 20 meter vertical dipoles in phase and did the same)

I have a Cascade on order and am thinking about ordering a 4 band Classic? from OHR when they become available. Did you ever find an ArgoII? If so, do you like it? Inquiring minds want to know...

We need to get together sometime.. Is the QRP group still meeting? Have a great day!

72 de KB4HG

On Tue, 27 Jun 1995, Aa4xx wrote:

>
>
> On Mon, 26 Jun 1995, Rick Zabrodski wrote:
>
> > The above is fine for monoband perfomance....has anybody built a phasing

> > box to allow multiband use? How did it work? Plans?
> ^
> Two years ago, I built a continuously variable phasing box which
> covers 80-20 meters, which is presented in the ARRL Antenna Compendium,
> Vol 3. This design works very well. I originally used it with two Gap
> Voyager verticals on 80 and 40 meters for DX work. Typical F/B ratios of
> 25-30 dB are easily obtainable.
> For this year's Field Day, I used two 40 meter inverted vees, 35
> feet apart, fed with this phasing box to make a 2 element inverted vee
> wirebeam. The wirebeam was oriented North/South. Results were very
> encouraging, with about 6 dB gain over a reference vee, and F/B ratios
> approaching 30 dBd on some signals. To change direction, all you have to
> do is flip a toggle switch, and bingo, you're ready for action in the
> opposite direction. It was really neat to be operating from NC, and be
> able to instantly determine if the station was North or South of my
> location simply by flipping one switch.
> This box is relatively easy to build, and the cost is moderate,
> about 75-100 bucks for all the parts. I'll be glad to share any ideas
> for anyone who might like additional information on the phasing box.
> Having the additional gain made it seem like we were running QR0.
> There were very few requests for repeats, and the QSO rate was pretty
> good throughout the 24 hours. 72,
> Paul
>
>

From qrp-l@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 95 08:00:49 EDT
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: [1284] Meeting K5F0 on Thurs in MD
Message-ID: <1995Jun27.080049.27807@wb3ffv.ampr.org>

I haven't heard from K5F0 yet as to whether he'll be able to make it on Thurs, but I'm planning on it. This will be at the same hotel as the last time, in Calverton--that's the exit off I95 between Laurel and the Beltway. It might be Route 212--not sure--but I do know it's also known as Powder Mill Road. Get off the exit and head to the west, and almost immediately (as I recall) there is a light with a 9 or more story hotel on the left--Holiday Inn, I think. Go to that hotel, and we'll meet him in the lobby. Last time it was at 1830 hours, so we'll shoot for that this time unless I hear otherwise.

So far the only one I've heard from has been AF4K, Brian. Don't know if W03B or W6TOY are able to make it. Anyone else is welcome to join us. We'll probably go to the same restaurant in the shopping center on the other side of the main road. If I remember, I'll leave

instructions at the front desk to give to any latecomers.

If anyone else is interested in coming, please let me know by direct e-mail; I'm currently getting the daily digest, so if you reply to the list there will be some delay. You can also call me at work at 410-290-1919, or 301-621-3340. The first number is Columbia, and the second is a Washington metro number which should be a local call from 'most anywhere in the metro area. (Ask for "Mike Ski".)

73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 07:23:29 -0500
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1285] K5FO/3
Message-ID: <199506271223.HAA02305@chuck.dallas.sgi.com>

Mike Czuhajewski, WA8MCQ, has posted the Thursday nite time of 1830 EDT (local) and that is fine. I am now located in "sunny" MD. :-)

I was in Cancun, XE1-land, last part of last week, went "through" the Dallas/FtWorth airport on Sunday and into BMI late Sunday nite due to thunderboomers in the area.

I am sorry that I wasn't home when Jim Larson called to let me know that the 40M band was open to KL7 land. Don't you know it always happens when you're gone.

Sounds like FD was fun for all and I'm enjoying the postings. I will not miss next year come rain or high water.

Will see the gang on Thursday nite. Be there be square.

dit dit de k5fo/3

p.s. I was doing 1,500W/meter**2 with solar power over the weekend.
:-)

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 95 08:44:03 EDT
From: haines@castle.drc.com (Larry Haines)
Subject: [1286] FCC ON LINE
Message-ID: <9506271244.AA14285@castle>

Hope this info will help a new ham make that first QSO sooner.

Larry Haines/N1IPR * haines@castle.drc.com * N. Attleboro MA

QST de W1AW
ARRL Bulletin 40 ARLB040
>From ARRL Headquarters
Newington CT April 18, 1995
To all radio amateurs

SB QST ARL ARLB040
ARLB040 FCC data on Internet

FCC data on Internet

The Federal Communications Commission is now offering the complete amateur service database on the Internet, via the FCC's file transfer protocol (ftp) site.

This new service marks the beginning of electronic granting of licenses at the FCC's Wireless Telecommunications Bureau. As soon as the data for a new license appears in the database, the license is effective and all privileges of that license may be exercised by the licensee.

Licensees will no longer need to wait to receive a license document in the mail; they may use the database as proof of licensing and go on the air immediately.

The database will be updated every Monday by noon (Eastern Time).

Information may be retrieved using the following procedure:

Access: anonymous ftp.fcc.gov
Directory: pub/XFS AlphaTest/amateur

Documentation: readme.txt

The FCC's Consumer Staff in Gettysburg, Pennsylvania, can answer questions at 800-322-1117 or 717-337-1212.

NNNN

/EX

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995

Date: Tue, 27 Jun 95 15:02:26 MEZ

From: Urs Schlegel <schlegel@ccgate.ari.ch>

Subject: [1287] QRP+ display

Message-ID: <9506271502.A10306@ccgate.ari.ch>

To QRP-L de Urs, HB9HAU

Do you see everything mirrored in the display of the QRP+? Have you difficulties to read the display? Here might be a cheap "cure" against the reflections: Cut a white sheet of paper or thin cardboard. One side measures the same as the horizontal axis of the display less 2mm (1/10"). The other side measures the same as the vertical axis of the display plus 12mm (1/2"). Fold over the 12mm section on the entire length of the sheet. You have now a sheet about the area of the display. Fold back the 12mm portion until it has an angle of about 120deg. Place the sheet with his short "leg" between the glass of the display and the metal of the case. Now, you see only the white sheet mirrored in the display. The numbers appear with much more contrast. If you look onto the transceiver, and have bent the sheet appropriate, you will only see the edge of the paper and thus, the paper will not disturb your view on the other areas of the frontpanel. Try it. It's cheap, quick and if you don't like it, you can use it as a QSL card...

73 de Urs, schlegel@ccgate.ari.ch

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995

Date: Tue, 27 Jun 95 08:25:39 CDT

From: msdooley@collie.aud.alcatel.com (Michael S. Dooley)

Subject: [1288] NE30-40/SW30 low power out

Message-ID: <9506271325.AA07568@collie.aud.alcatel.com>

Dave, Brien, Jess, Ted, Mike, and all the rest...

This is to all the folks who responded to my messages about low power and motorboating on my SW30. I've cured the problem thanks to you guys! Shortening

the leads on the final did the trick. I now get a little over 1.5 watts out and no motorboating! I did turn it down to about 1 watt after I got it working. It now puts out just under 1 watt. The receiver works great, too! Only problem was finding someone to work last night after I got it built... But, there's always tonight!! See ya' on 30!!

Mike KE4PC

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 07:58:22 -0600
From: Chuck Broadwell <cbroadwe@aoc.nrao.edu>
Subject: [1289] Solar power Field Day
Message-ID: <199506271358.AA00763@cmbipc.aoc.nrao.edu>

Hi all,

I noticed several references to solar charging of batteries during Field Day. I don't know if any of these batteries were charged while in use. My personal feeling is that in the spirit of "emergency preparedness" it is perfectly logical to solar charge batteries while in use for Field Day. ARRL seems to feel otherwise:

> Dear Chuck:

> You wrote:

> >The field day rules state:

> > "Batteries may be charged while in use for Class C entries only."

> >This would seem to rule out the use of a solar charger on a battery while
> >using the battery to run the rig. Is this true?

> Correct. Unless you are running in the Class "C" category.

> You could, however, use the solar panel to run the rig directly.

> >The article, "A Solar-Powered Field Day" in May, 1995 QST seems to indicate
> >a situation where the solar charger is connected to the battery while the
> >rig is in use (for field day).

> Unfortunately, no one in the editorial department checked with us as to
> whether or not the article complied with Field Day Rules. We noticed this
> about the same time you did, i.e., when we got the magazine.

> You can use a solar charger to recharge your batteries; you just can't use

> that battery while it's being recharged. This means that you need to swap
> batteries, pretty much.

> >Can someone please clear up my confusions?

> I hope this helps, Chuck. FD rules can be a bit confusing, so don't feel
> bad. If you still have a few questions, don't hesitate to get in touch with
> me.

> 73,

> Warren C. Stankiewicz, NF1J
>ARRL Assistant Contest Manager

Anyone else think this sounds like a rule that needs changing?

73

Chuck, W5UXH
cbroadwe@aoc.nrao.edu

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 11:00:24 -0400
From: Dan Puckett <af045@dayton.wright.edu>
Subject: [1290] Pixie 2 problems
Message-ID: <9506271500.AA20162@dayton.wright.edu>

Hi all,

I've noticed several folks have seen the Pixie 2 article in QRPP. If any are planning to use the printed circuit artwork, I would like point out an error. The schematic shows pins 3 and 4 of the 386 tied together. The artwork leaves pin 3 floating.

I just finished building mine. I got the board at Dayton, but didn't have the time to play until recently. Am I the only to get a loud hum out of the receiver? No received signal, just a hum. Seems to transmit ok. Just curious.

Oh well, back to the soldering iron.

Dan WD8AAU ouch ouch (man is that iron hot)
af045@dayton.wright.edu

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 11:11:57 -0400
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [1291] Re: FIELD DAY - No challenge for my QRP!
Message-ID: <199506271511.LAB16533@dartvax.dartmouth.edu>

>****

> Field Day is over and I lost! I didn't just lose, but I went away
>weeping. My QRP rigs were NO match for the big guns out there is KW land.

So sorry OM,

I am planning a QRP FD myself for next year, and I will avoid Golden Pond
NH like the plague! :)

Antennas are everything in this QRP game. I set up a 40 meter vertical
with 8 radial for the start of the FD operations. I added 8 more on
Sunday morning. A nameless big gun tried that antenna at the 2'oclock
start. He immediately got very excited, and declared "We are not getting out",
change the antenna, put up a 40 meter dipole, check the radio, switch
the radio!!!

As I got my archery equipment out again, Dot, who is the wife of
Bill Burden, ARRL div manager, and is also a ham, got on that same
rig, the same antenna, at the same table, and started making contacts
one after the other.

I couldn't resist the temptation, so I said to Dave, "Well I guess we
changed the right thing on that 40 meter station!!". :) "It's working
just fine now".

All kidding aside now, Dave did redeem himself. I had the pleasure of
sitting in and listening to him work station after station. My code
skill has increased since last year, because I couldn't even follow
the contacts then. I could not only follow the flow, but I could actually
understand the calls as he logged them. This is a big improvement for me.
I have a code program that gives timed code practice. I have to type the
call on the key board is so many seconds before the computer moves on
to the next word. I will be doing a lot of this kind of practice.
Dave has been a ham for over 20 years and is an avid tester. I like
contesting for the great code practice. When I got my extra last year,
that didn't mean that I could actually do 20 wpm. It just meant that I
passed the test. I can't write any faster than 20 wpm. So now I am doing
it in my head. I bought a code practice device from C.A.T. in Dallas on
a business trip there this past March, and I have been using it in the
car with good results.

My goal is to become a good code operator. So I practice, practice, practice. I have no talent for it, so I must keep plodding along.

So that is what FD means to me. Great code practice.

73 de AA1IK

Ernie

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 95 10:29:07 EST
From: John Foote <footej@hn.va.nec.com>
Subject: [1292] What is this call?
Message-ID: <9505278042.AA804274207@bills.hn.va.nec.com>

Anyone know what a 9A call is? I worked 9A2AJ last night on 30 m at 10.103 MHz at 0330 UTC.

9A isn't in my book. I didn't get his QTH through the static.

72 de KR4GL

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 95 11:44:40 EDT
From: jcumming@clark.dgim.doc.ca (Jim Cummings)
Subject: [1293] Re: What is this call?
Message-ID: <9506271544.AA29658@clark.dgim.doc.ca>

> Anyone know what a 9A call is? I worked 9A2AJ last night on 30 m at
> 10.103 MHz at 0330 UTC.
>
> 9A isn't in my book. I didn't get his QTH through the static.
>
> 72 de KR4GL
>
>
>
>

As I can recall, it is Croatia.

=====
Jim Cummings
eMail:jcumming@clark.dgim.doc.ca
packet:VE3XJ@VE3JF.#EONT.ON.CA.NOAM
73 and live better digitally
DON'T GET TOO EXCITED...
because remember, today is the first
day of the rest of your life.
=====

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 09:19:15 -47900
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [1294] Re: Solar power Field Day Rules
Message-ID: <Pine.3.89.9506270948.C16954-0100000@dt1.datatamers.com>

Chuck,
Yes, I think the rule needs changing. It seems pretty dumb to me! 72,
Dave, W6EMD

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 12:28:46 -0400
From: PDouglas12@aol.com
Subject: [1295] Re: NE30-40 low power out
Message-ID: <950627122215_103260700@aol.com>

Mike,
Yes, I had the same experience. Here's the solution: First make sure the two coils (L3/L4? -- the ones that clean up the 602 output to the 2n2222's are right. I got a wrong toroid in there somehow. If you have an inductance meter, take 'em off and measure them--they are spec'd at 7.8uH but anywhere around 8uH plus or minus will do. One of mine read a whopping 56uH which explains why it misbehaved.

Now, before you do anything drastic like that, do try very carefully tuning those two little capacitors for max output from the case of the second 2n2222 (clip a lead to it and put it near the antenna -- not touching!-- of your main station rig. Tune for max on the s-meter. They are interactive, so go back and forth till you have the real max.) This is done with the little drive pot turned OFF--counterclockwise.

Also check: the transformer that carries the rf to the final. And count the turns on all toroids. Finally, pull the 2n3553 and try a Radio Shack 2n3053--if it gives you about .7 watts, then it is the final and you need

another 2n3553. Also, much of this advice is from Dave Benson NN1G himself, who is on the list here. He may wish to belay any of the above advice! And I do not know whether the wrong toroid was my mistake or SWL's, but knowing what a slob I am when building, I can readily guess! I am posting this to the group, in case it may help others. I would add that I made over 40 FD contacts with that little rig on battery power and a dipole, so I am very very happy with its performance now that I have undone all my errors. And if you do have a wrong toroid too, please let me know so we can tell Dave and correct the problem. 72, Preston WJ2V

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 11:03:56 -0600 (MDT)
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>
Subject: [1296] Re: Twin Vertical Phased Array
Message-ID: <Pine.SUN.3.91.950627110240.3374B-100000@ume>

Did you write the article as well?
Would it be modified easily for 10 thru 40?
Will check it out..friend has a copy of compedium 3.

Dr. Rick Zabrodski BSc, MD, CCFP(E)	*	VE6GK
Email: zabrodsk@med.ucalgary.ca	*	NorCal 519 ARCI 7650 GQRP 8329
Phone 403-271-5123 Fax 403-225-1276	*	"Power is no substitute for skill"

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 13:07:57 -0400
From: scalawag@ids.net
Subject: [1297] Re: What is this call?
Message-ID: <199506271707.NAA35178@nss1.CC.Lehigh.EDU>

Confirming that 9A is Croatia. Congrats (assuming u were QRP!) Also on 30m very close to the freq of the 9A last night was T91ENS, Boris in Bosnia. That geogrqaphical area was coming in to New England vy nicely last night with S5 (Slovenia) and LZ (Bulgaria, 2 stations) present as well! Hopefully condx the same tonight. (A couple of these guys went begging for QSOs w/o any replies to their CQs after the first few QSOs)

72/73 Lee & Good DX

Vernon L. Rosson	Reward: lost dog
e-mail	3 legged, one eye,

LeeW5TEH@aol.com mange, broken
 or tail, recently
SCALAWAG@ids.net castrated. Answers
 to the name, "Lucky."

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 10:22:24 -0700 (PDT)
From: H Smith <hbs@crl.com>
Subject: [1298] North Tex/Dallas/FtWorth QRPers!!!
Message-ID: <Pine.SUN.3.91.950627101826.23878A-100000@crl5.crl.com>

Attention all North Texas, Dallas/Ft Worth QRPers!

The NORTEX QRP Club meeting is this Saturday at 10AM. As usual, we will be meeting at K5FO's place of business (See directions below).

Come hear tall tales about QRP Field Day and XE1/ operation from Cancun!

Directions to the meeting:

First floor of the building on the southeast corner of Arapaho and Addison Rd. It's one block north of Beltline. Quorum Centre is the name of the building - three stories glass and brick.

Come into the main entrance and follow the signs to the SGI Training room.

As K5FO would say "Be there are be square".

Smitty, NA5K

Henry Smith (hbs@crl.com)

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 13:47:08 -0400 (EDT)
From: "Warren E. Lewis" <saswel@unx.sas.com>
Subject: [1299] Re: Field Day
Message-ID: <199506271747.AA29639@cardamom.unx.sas.com>

Russ,

----- Johnson Russ writes -----

>

>

> ----Warren E. Lewis writes-----

>

> .. Doesn't seem like many folks know how to

> .. zero beat either.

>

> Thats one of the tricks, with QRP sounding different often helps!

I don't mean a 100-200Hz off....we had people trying to call us close to 500Hz off frequency. And we had other folks calling another station running rate on our frequency and we were about 750Hz away from them. On a crowded band it is very difficult when you get called so far off frequency! Alot of times we just gave up on them and hoped that they would figure it out and move some so we didn't have to try and copy them under someone else's keying.

cheers - Warren

--

Warren E. Lewis
Technical Support Division
SAS Institute Inc.
Cary, NC

saswel@unx.sas.com
(919) 677-8001 x6542
PP-ASEL
AD4ZE DOD#0021

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 11:51:37 -0600
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [1300] NA5N FD Report
Message-ID: <199506271751.LAA24251@zia.aoc.nrao.edu>

Hi 'yall,

Re: The NA5N 2A NM QRP Field Day station:

Looks like ~270 CW contacts on 15, 20 & 40M; about twice what we were expecting. We were pleasantly surprised at the callback rate. Our QRP FD bore little difference than our QRO experiences in the past; we were pinching ourselves to remember "this is QRP." I'd venture to say, most of the stations who worked us had no idea we were running 4-5 watts. We worked both coasts and inbetween (except where were the "3's?"). It's gonna be "QRP for 96!"

Operators: Doug AB5WT, Chuck W5UXH, Paul NA5N and Dave N1IRZ

STN #1: Doug AB5WT used his just-finished OHR 20/40M rig; erected his GAP vertical and "magnetic radiator" 40M loop and operated from inside his VW "Vanagan" off NiCads. Nice station.

STN #2: Chuck W5UXH used his "just arrived" QRP+, built into a small rack with antenna tuner, 7AH gel cell, etc. for a nice arrangement. Erected his R7 vertical and 80M dipole, center supported by a 16 foot pole for a gentle-sloping inverted vee, fed with ladder line (and used on 20 and 40M with tuner). Batteries charged by solar cells (the day before, naturally!)

QTH: Atop a high hill/mesa overlooking Socorro, NM and the Rio Grande Valley. Probably about 6500 feet, 12 mi. from town.

Doug and Chuck erected the stations about 2 hours before FD and operated through early evening. Dave N1IRZ showed up and worked a couple of hours (unexpected, but welcomed operator); Paul NA5N worked the "nite shift" until 3:30am when a ferocious windstorm halted operations until 6am. The 2 stations were probably manned 50% of the time at best; when you're on a QRP FD/camping trip with your good friends (and a 7 week old Springer Spaniel), we spent as much time enjoying ourselves as we did Field Day! Now that we know a good QRP station can be successful, we might even try to be competitive next year.

A FEW THINGS LEARNED ...

To quote Smitty, NA5K (no relation) ... we're not FD or contest experts either, but will ditto his comments and a few of our own - things done both by design and by accident.

1. Doug and Chuck had setup their stations on the same spot 2 weeks ago; most problems encountered were thus ironed out by FD.
2. Erect good antennas! Ones that are tuned and well matched; get the power into the air, not the antenna tuner. When one station was on a wire antenna, our other was on the vertical - caused little QRM.
3. Learn to zero beat. Stations calling CQ FD are running NARROW filters; I heard stations calling 500Hz to 1 KHz OFF! He just won't hear you.
4. Call a station; if no reply, move 100 Hz or so and try again -- try to fall in his filter. If after 3-4 tries no response, move on.
5. If YOUR rig doesn't have a narrow CW filter ... build or get one!
6. Avoid the congested bands and/or pileups. Let the big guns work out the band and move on. Then move in. 20M is the first band hit -- start out on 15 or 40; move to 20M early evening when everybody else is moving to 40M, etc.
7. Have a "nite shift." There's alot to work after midnite. Plus, the hot shot ops are in bed; code speeds are thus a bit slower and at a less frantic pace. (Its also cool and less distractions at night).
8. If you're using somebody elses rig ... learn how it works, what the

- sidetone freq. is so you can zero-beat the calling station, etc.
9. Keep those batteries up or a spare! We all know what our QRP rigs sound like on weak batteries -- nothing most contesters would answer back.
 10. Develop a logging system everybody is comfortable with; we used good old paper and pencil system drafted by Chuck. Speed up your log keeping and you'll speed up your contacts. Might try computer logging next yr.

Most of all, have fun. Combine it with a camping trip, go with friends, etc. so you can enjoy yourself, both ON and OFF the air.

I also encourage all FD participants to contact the ARRL and their SCM's to incorporate a QRP class for future FD's. There is no on-the-air distinction for QRPers, and there should be one. Many stations would be more inclined to work that weaker station if they knew it was QRP. Maybe WORKING a QRP station should be worth an extra point! Put "QRP" on your summary sheets, etc. to the ARRL ... we need to let them know how many QRPers are out there. 2A-battery should be 2Q or something.

CU for the next QRP A Field and Colorado (CQC) QRP QSO Party
(and Trinity special event station on July 15-16, 1995)

Paul NA5N
Chuck W5UXH
Doug AB5WT Socorro, New Mexico

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 14:02:24 -0400
From: PDouglas12@aol.com
Subject: [1301] Hitting the sweet spot
Message-ID: <950627140153_79368743@aol.com>

Dan Johnson, KC4EWT hit the nail on the head with his comments about getting your QRP sig into the other fellow's filter center--his "sweet spot," as Dan calls it. Usually, this should occur if your xmt offset is correctly setright about 750-800 Hz (zero beating is not such a simple concept on CW), but may require a little rocking of that dial if he isn't hearing you. I too had this everyday QRP technique reinforced on FD. Real good advice, Dan.
Thanks. Preston WJ2V

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 14:02:28 -0400

From: PDouglas12@aol.com
Subject: [1302] I worked K3WW too
Message-ID: <950627140207_79368901@aol.com>

Hey Charles, you did very well. I worked you on 80cw with my SWL80. You were the only QRP-L subscriber I worked, as far as I can tell after using Chuck Adam's list against my dupe sheets. FB OM. Preston WJ2V

From qrp-l@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 14:09:30 -0400
From: JessQRP@aol.com
Subject: [1303] Re: NE30-40/SW30 low power out
Message-ID: <950627140831_79373843@aol.com>

Thanks for the response. Let me know and I know this sounds like a stupid question, but which transistor leads did you shorten? Would make me curious as to all of mine were I thought about as short as possible which would "lead" ;-0 me to beleive that I may have somethihng else amiss!

Jess

From qrp-l@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 14:10:15 -0400 (EDT)
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [1304] New welcome file
Message-ID: <95Jun27.141016edt.14522-4+17@hooch.CC.Lehigh.EDU>

Gang,

The QRP-L welcome file (the file you're sent when you first subscribe) has been updated, and is appended for your reading pleasure. Please save a copy for future reference.

/jim

Welcome to the Internet QRP mailing list!

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1. Introduction
2. The Essentials
3. Common List Server Commands
4. QRP-L Unique List Server Commands

- 5. FTP Archive
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- 7. QRP-L History

1. INTRODUCTION

The QRP mailing list is open for discussion of any subjects relating to low-power amateur radio operation. Example topics: portable operation, equipment design and construction, solar and battery power, QRPP, contesting, kit building,

2. THE ESSENTIALS

* COMMANDS TO THE LIST SERVER

Must be sent to `listserv@Lehigh.EDU` in the BODY of the mail message, not in the Subject: of the message.

* POSTING TO THE LIST

Messages you wish to have distributed to the list must be sent to `qrp-l@Lehigh.EDU`.

* OTHER STUFF

A copy of this file is available in QRP-L/WELCOME.TXT. Hopefully an up-to-date Frequently Asked Questions (FAQ) file will soon be available to supplement or replace this file. Watch for an announcement on the list.

Please keep your mailing address up to date. If your e-mail address is to be changed please unsubscribe and resubscribe from the new address. If your mail bounces for 'no such user' or 'no such machine', you will be removed from the list. Please try to subscribe from a system that doesn't send periodic 'I couldn't deliver the mail for 1 hour/3 hours/1 day/etc.' messages as it makes it that much more difficult to manage the list.

Please do **not** send subscribe/unsubscribe requests to the entire list. If you are having problems, send email to:

Jim Eshleman <`lujce@Lehigh.EDU`>
or
Chuck Adams <`adams@sgi.com`>

3. COMMON LIST SERVER COMMANDS

Remember, all these commands must be sent to `listserv@Lehigh.EDU` in the

BODY of the mail message, NOT in the Subject: of the message.

* GETTING ON THE LIST

SUBSCRIBE QRP-L your_name your_call

where "your_name" is your real name, and "your_call" is your callsign, if any. For example:

SUBSCRIBE QRP-L John Doe K5FJZ

* GETTING OFF THE LIST

UNSUBSCRIBE QRP-L

* SUBSCRIBING TO THE DAILY DIGEST

If you'd rather receive one e-mail a day containing all the postings with a table of contents at the beginning, use this command after you have subscribed to the list. Warning: The daily digests are large. You also use this command to start receiving digests again after having postponed your subscription.

SET QRP-L MAIL DIGEST

* POSTPONING YOUR SUBSCRIPTION

If you're going on vacation, or you just want to stop receiving QRP-L for awhile but still want to remain a member of the group, use this command. You'll still appear on the recipients list, but will receive no mail.

SET QRP-L MAIL POSTPONE

* RECEIVING INDIVIDUAL POSTINGS

Use this command to start receiving individual postings after having subscribed to the digest or postponed your subscription. This is the default set when you first subscribe to QRP-L.

SET QRP-L MAIL ACK

* GETTING A LIST OF SUBSCRIBERS

Use this command to receive a list of all QRP-L subscribers. The list includes each subscribers name, e-mail address, and call.

RECIPIENTS QRP-L

* OBTAINING A FILE INDEX

To receive a list of all QRP-L related files available via the list server, use this command. Note that all the files are also available via the anonymous FTP server at ftp.Lehigh.EDU.

```
INDEX QRP-L -ALL
```

* RETRIEVING A FILE

Use this command to retrieve a file via the list server. If the file is a binary file it will be UUEncoded before being sent.

```
GET QRP-L/subdirectory filename
```

For example, to retrieve the daily archive (all the list messages) from April 6, 1993 use the following command:

```
GET QRP-L/ARCHIVES-OLD/1993 930406
```

* SEARCHING THE ARCHIVES

You can search the list archives (files) for a "regular expression" pattern. If you don't know what that means, you can just specify a word. All files in the specified archive (directory) are searched. While the search is case insensitive, the server seems to have trouble at times with uppercase letters in the pattern, so please use all lower case characters. The output returned to you just shows the lines in each file that matched the pattern. You then have to GET the file(s) you want. Send a HELP SEARCH command for more information. For example:

```
SEARCH QRP-L/ARCHIVES "^subject:&administrivia"
```

returns the following output:

```
Matches for pattern ^subject:&administrivia ...
```

```
--- Archive: Archives (path: qrp-l/Archives)
```

```
>>> File 950522:  
Subject: Administrivia  
<<< End of matches in file 950522
```

```
>>> File 950525:  
Subject: Administrivia: Digests  
Subject: Administrivia: lost mail
```


Subject: Re: Administrivia: lost mail
<<< End of matches in file 950525

>>> File 950601:
Subject: Administrivia: Digest format
<<< End of matches in file 950601

* OTHER LIST SERVER COMMANDS

For more information on all the available list server commands, try sending the following:

HELP
HELP TOPICS

and for more detailed information on a specific command, like GET:

HELP GET

4. QRP-L UNIQUE LIST SERVER COMMANDS

* RECIPIENTS SORTED BY CALL AREA

This command runs Smitty's qrp_call program, which returns a report of QRP-L subscribers sorted by call within call area.

RUN QRP-L X QRP_CALL

A PC version of the program is available in QRP-L/TOOLS/QRP_CALL.ZIP. It uses the output of the list servers RECIPIENTS QRP-L command as input.

* GREAT CIRCLE DISTANCE

You can compute the great circle distance between a pair of Lat/Long locations. For example:

RUN QRP-L X GC 40.2231N75.1758W 33.0276N96.5963W

returns:

Bearing is 254 Degrees for 1129 Nautical Miles = 1299 Miles = 2090 Km

* LOOKUP A CALL IN THE FCC DATABASE

RUN QRP-L X FCC_CALL callsign

where "callsign" is the call you wish to lookup.

* GREAT CIRCLE DISTANCE BETWEEN TWO CALLS

RUN QRP-L X CALLS2DIST callsign1 callsign2

For example:

RUN QRP-L X CALLS2DIST K3WW K5FO

returns:

K3WW ZIP = 18944
K5FO QTH = ADAMS, CHARLES N
830 WAITE DR COPPER CANYON
LEWISVILLE TX 75067

K3WW Lat/Long = 40 22 19 N 75 17 35 W
K5FO Lat/Long = 33 02 46 N 96 59 38 W

Output from "gc 40.2231N75.1758W 33.0276N96.5963W":

Bearing is 254 Degrees for 1129 Nautical Miles = 1299 Miles = 2090 Km

5. FTP ARCHIVE

The anonymous FTP archive at ftp.Lehigh.EDU in pub/listserv/qrp-l mirrors the files available from the list server. Or use a WWW browser:

<ftp://ftp.lehigh.edu/pub/listserv/qrp-l>

Note that files are compressed, i.e. end with .Z, but if you ftp without the .Z extension, the file will automatically be uncompressed.

6. WWW HYPERMAIL ARCHIVE

You can read the postings to the list via the URL:

<http://www.lehigh.edu/lists/Archives/qrp-l>

7. QRP-L HISTORY

This list was started by Chuck Adams, K5FO, (adams@sgi.com) by an announcement on the rec.radio.amateur.misc USENET group in early 1993. Bruce Walker, WT1M, maintained the mailing lists and FTP area from then through August 1994 on a system at Thinking Machines Inc, Think.COM. Then it was moved to qrp-l@netcom.com until May 14th, 1995. Thanks to Mike Ardai, N1IST, for all his hard work during the time that QRP-L was on netcom.com.

Chuck is still the keeper of the non-electronic archives, including copies of some schematics, etc. Contact him directly or watch this list for more info.

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 13:16:08 +0000
From: plquick@facstaff.wisc.edu (Paulette Quick, N90UH)
Subject: [1305] Why an offset on HF?
Message-ID: <199506271813.NAA31974@audumla.students.wisc.edu>

Another basic question:

Why would a commercial HF rig have an 800 Hz offset (as does my Kenwood TS830S)?

I thought this was a quirk of my rig, but I see Preston, WJ2V mentioned it in a posting.

Seems to me some local hams told me their commercial HF rig doesn't have an offset.

What's the background?

(learning this stuff one bit 'n dit at a time)

72 de N90UH
Paulette Quick
plquick@facstaff.wisc.edu

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 95 14:21:31 EDT
From: "N100Q Tom R. @ MR01 27-Jun-1995 1414" <randolph@est.enet.dec.com>
Subject: [1306] Polyphase networks for SSB?
Message-ID: <9506271821.AA07266@us4rmc.pko.dec.com>

QRPers,
Anyone ever try a "polyphase network" to get 90 degree phased audio for SSB? June QEX has an article by JA1K0. It looks exceptionally easy for such a difficult task - simply a network of 16 resistors and 16 capacitors, flat phase response within a degree or two from 300 to 3000 Hz, less than 1 dB attenuation from 40 Hz to 20 KHz.

-Tom R. N100Q radolph@est.enet.dec.com

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 11:39:15 -0700
From: aa7qy@primenet.com (Roger Hightower)
Subject: [1307] Re: What is this call?
Message-ID: <199506271839.LAA21931@mailhost.primenet.com>

> Anyone know what a 9A call is? I worked 9A2AJ last night on 30 m at
> 10.103 MHz at 0330 UTC.
>
> 9A isn't in my book. I didn't get his QTH through the static.
>
> 72 de KR4GL
>
9A is Croatia....most lists/books were published before the split in Yugoslavia,
so they don't show it.

73, de Roger AA7QY
aa7qy@primenet.com rhigh@aztec.asu.edu Ham Radio: AA7QY@KC7Y.AZ.USA.NA

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 16:53:20 -0230 (NDT)
From: Bob Gobrick V01DRB/WA6ERB <bgobrick@terra.nlnet.nf.ca>
Subject: [1308] Re: Pixie 2
Message-ID: <Pine.OSF.3.91.950627164933.28055A-1000000@terra.nlnet.nf.ca>

Tim,

Just a short reply - well the Pixie II does receive but as you can guess
just barely. A good test is design it for the 3.579MHz color burst
frequency and at least you can pick up W1AW broadcasts at night - it is
so broad it gets that and anything near by.

I built mine in a Sucrets box and it looks neat - unfortunately i haven't
worked anyone up here in Newfoundland yet but I know it works.

Anyway have fun - a bunch of other folks are building the Pixie also.

73/72 Bob V01DRB/WA6ERB

Bob Gobrick V01DRB/WA6ERB/VE2DRB Newfoundland, Canada

QRPer Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP

Internet: bgobrick@terra.nlnet.nf.ca
rgobrick@public.compusult.nf.ca

Compuserve: 70466.1405@compuserve.com

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 95 15:56:28 EDT
From: "Dennis, K1YPP, 226-5982 27-Jun-1995 1541" <blanchard@nac.enet.dec.com>
Subject: [1309] Must still be in FD mode?
Message-ID: <9506271949.AA02055@us1rmc.bb.dec.com>

Hi folks:

Someone called us yesterday at Jade Products Inc. to place an order for some things, and wanted them shipped COD. The funny thing is he was so excited about finding what he was looking for that he hung up before he gave his name, address or phone number!

Since several of you folks order from us, is it possible it was someone from qrp-1? If so, could you call back and give the address?

I think he was in contest mode and moved on to the next QSO before finishing the last one!

Sorry to bother the rest of you, but I just know we are going to get a call in a day or so complaining that the order has not yet arrived!

72'

Dennis, K1YPP

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 14:33:03 -0600
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [1310] Re: Why an offset on HF?
Message-ID: <199506272033.0AA03370@zia.aoc.nrao.edu>

>From: plquick@facstaff.wisc.edu (Paulette Quick, N90UH)
>Why would a commercial HF rig have an 800 Hz offset (as does my Kenwood
>TS830S)?
>(snip)
>(learning this stuff one bit 'n dit at a time)
>72 de N90UH
>Paulette Quick

Most HF rigs, QRO or QRP, use a common VFO that determines both the transmit and receive frequency. With NO offset, you would have to "zero-beat" to the station you wish to QSO in order to be exactly on their frequency. Only problem is copying code while zero-beated, all you'll hear is the "thump thump thump" of the CW.

Most CW ops find 700-800 Hz to be the most pleasing "tone" to copy CW. Therefore, an offset is built in that shifts the VFO frequency by 750 Hz or so between transmit and receive. Thus to properly "zero-beat" to the station, you tune them in until the CW sounds like 750 Hz, and your transmit frequency should be right on top of him/her (since it is REALLY 750 Hz away). This way, when you are exactly on the other stations frequency, the receiver will be shifted during receive to produce the 750 Hz OFFSET, which produces the 750 Hz audio tone for pleasing copy.

It takes a little practice to recognize 750 Hz, but its a skill you need to develop to ensure you are smack on the other guys frequency. And by the way, when you hear the term nowadays "zero-beat," it generally refers to tuning in the station for the proper 750 Hz OFFSET CW tone.

72, Paul NA5N
thump thump (zero-beated "dit dit")

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 16:33:06 -0400
From: PDouglas12@aol.com
Subject: [1311] Re: Why an offset on HF?
Message-ID: <950627163302_79480299@aol.com>

Hi Paulette,
Oh, this is complicated. Offsets are something that I didn't really understand until I was an Extra. It is not an easy subject, and I have never seen a thorough exposition on offsets and zero beating. In an effort to understand it myself, I have drafted up an excessively long article on this issue of zero beating and offsets, complete with diagrams and labels on the back (as in Alice's Restaurant). It is so long it might be suitable as a short series (miniseries?) in one of our journals. It starts out discussing

D(irect) C(onversion) receivers, and then considers filters and single signal superhets. Meanwhile, suffice to say that when your transmitter is properly zero beat with an incoming station, both his RECEIVER VFO and your RECEIVER VFO are set about 750-1000 away from his and your TRANSMITTER VFOs. And both your and his transmitter are (hopefully) on the same frequency. If you're interested in the why of all this, well, I'll try to get that article out.

It is much easier with the pictures.

72, Preston WJ2V

I

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 17:45:35 -0500
From: Steve.hideg.1@nd.edu (Steve Hideg)
Subject: [1312] QRP-L Resource Page Update
Message-ID: <ac163a2d00021003f087@[129.74.35.16]>

New!

Pictures from the shack of Brad Mitchell, WB8YGG.

<http://qrp.cc.nd.edu/QRP-L/index.html>

From qrp-1@lehigh.edu Tue Jun 27 18:58:18 1995
Date: Tue, 27 Jun 1995 18:51:17 -0400 (EDT)
From: RAINS@NKU.EDU
Subject: [1313] Help w/ windows mouse driver
Message-ID: <01HS7LRT0AZ6CB97WP@NKU.EDU>

Hello all, this message isn't directly related to amateur radio, but I need some help. I had to move my mouse to com4 and I need a windows driver that will support this. Mine only covers 1 & 2. Does anyone know if there is an ftp site where I can get windows mouse drivers?

Thanks & 73 de AA9KM
Justin

rains@nku.edu